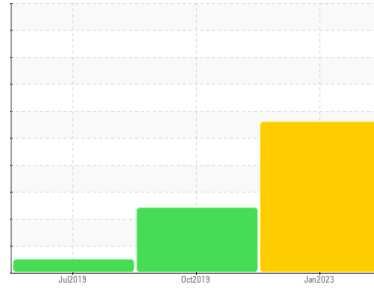




PROBLEM SUMMARY

Sample Rating Trend



WATER

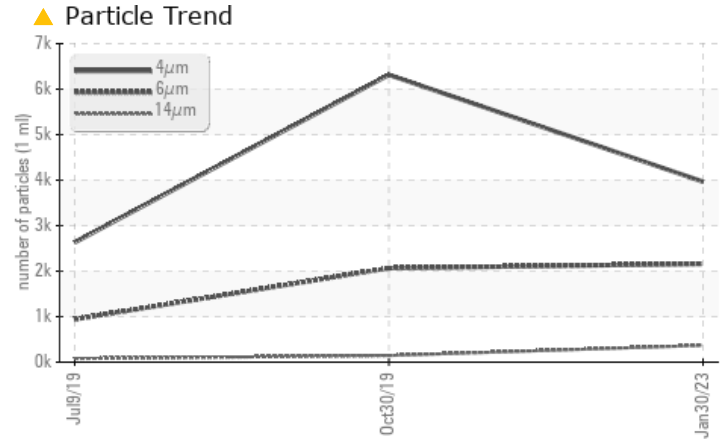
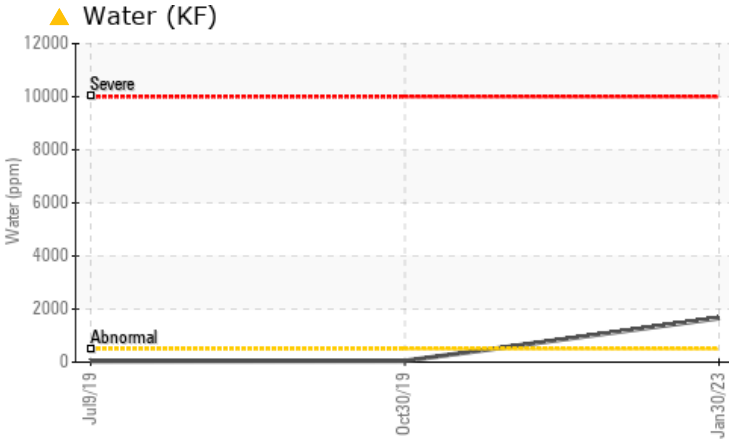


Machine Id
KAESER CSD 75 4539854 (S/N 1133)

Component
Compressor

Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | ABNORMAL | ATTENTION | NORMAL |
|-----------------|--------|--------------|-----------|-------------------|-----------|--------|
| Water | % | ASTM D6304 | >0.05 | ▲ 0.166 | 0.004 | 0.004 |
| ppm Water | ppm | ASTM D6304 | >500 | ▲ 1660 | 47.0 | 40 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 2161 | ▲ 2065 | 940 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ 368 | ▲ 145 | 78 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ 124 | ▲ 37 | 18 |
| Particles >38µm | | ASTM D7647 | >4 | ▲ 19 | ▲ 8 | 2 |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ 19/18/16 | ▲ 18/14 | 17/13 |
| Debris | scalar | *Visual | NONE | ▲ MODER | NONE | NONE |
| Free Water | scalar | *Visual | | ▲ 1.0 | NEG | NEG |

Customer Id: PIAMAL
 Sample No.: KCP55743
 Lab Number: 05764110
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---------------|--------|------|---------|---|
| Change Fluid | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |
| Change Filter | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |

HISTORICAL DIAGNOSIS

30 Oct 2019 Diag: Angela Borella

WEAR



Resample at the next service interval to monitor. An increase in the aluminum level is noted. All other component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



09 Jul 2019 Diag: Jonathan Hester

NORMAL



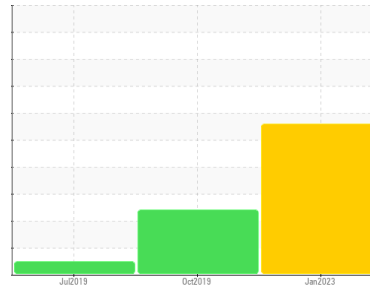
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER CSD 75 4539854 (S/N 1133)

Component
Compressor

Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present in the oil. Free water present. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | KCP55743 | KCP21291 | KCP19728 |
| Sample Date | Client Info | 30 Jan 2023 | 30 Oct 2019 | 09 Jul 2019 |
| Machine Age | hrs | 73330 | 56346 | 52857 |
| Oil Age | hrs | 1849 | 2682 | 2906 |
| Oil Changed | Client Info | Changed | Changed | Changed |
| Sample Status | | ABNORMAL | ATTENTION | NORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|----------|---------------------|------------|----------|----------|
| Iron | ppm ASTM D5185m >50 | 36 | 2 | <1 |
| Chromium | ppm ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm ASTM D5185m >3 | 0 | 0 | 0 |
| Titanium | ppm ASTM D5185m >3 | 0 | 0 | 0 |
| Silver | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >10 | 3 | ▲ 14 | 3 |
| Lead | ppm ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm ASTM D5185m >50 | 3 | 9 | 5 |
| Tin | ppm ASTM D5185m >10 | 0 | 0 | <1 |
| Antimony | ppm ASTM D5185m | --- | 0 | <1 |
| Vanadium | ppm ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|---------------------|------------|----------|----------|
| Boron | ppm ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm ASTM D5185m | 0 | 0 | <1 |
| Molybdenum | ppm ASTM D5185m | 0 | 2 | 0 |
| Manganese | ppm ASTM D5185m | 0 | 0 | <1 |
| Magnesium | ppm ASTM D5185m | 0 | <1 | 2 |
| Calcium | ppm ASTM D5185m | 0 | 0 | <1 |
| Phosphorus | ppm ASTM D5185m 500 | 41 | 235 | ▲ 89 |
| Zinc | ppm ASTM D5185m | 0 | 65 | ▲ 33 |
| Sulfur | ppm ASTM D5185m | 678 | 888 | ▲ 318 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|---------------------|----------------|----------|----------|
| Silicon | ppm ASTM D5185m >25 | <1 | <1 | <1 |
| Sodium | ppm ASTM D5185m | 0 | <1 | <1 |
| Potassium | ppm ASTM D5185m >20 | 0 | 3 | <1 |
| Water | % ASTM D6304 >0.05 | ▲ 0.166 | 0.004 | 0.004 |
| ppm Water | ppm ASTM D6304 >500 | ▲ 1660 | 47.0 | 40 |

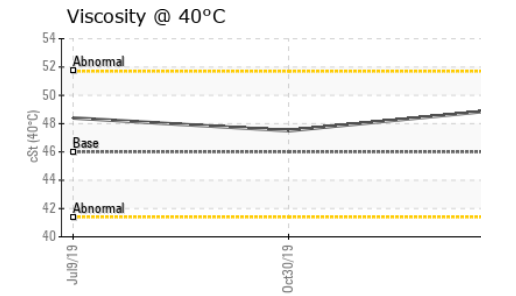
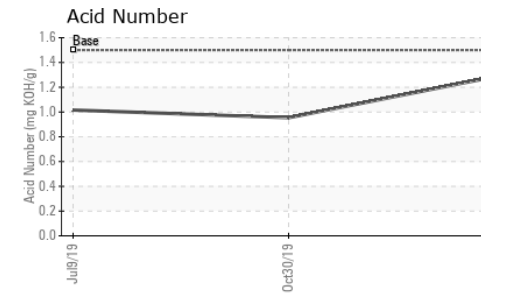
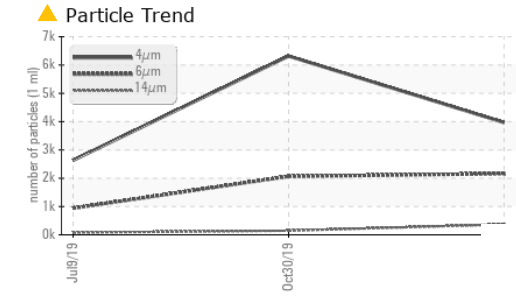
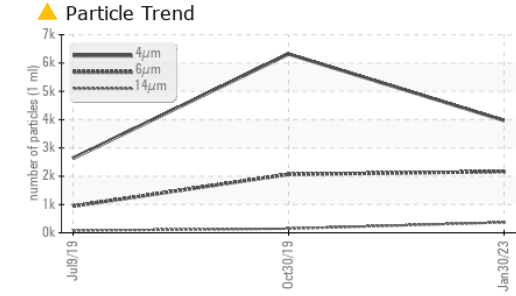
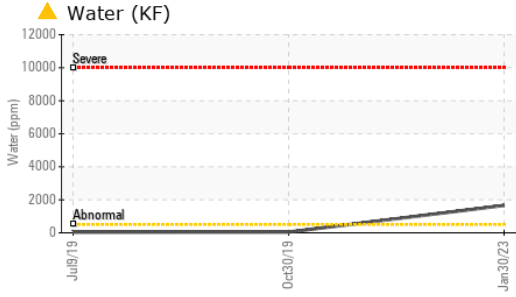
FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-------------------|----------|----------|
| Particles >4µm | ASTM D7647 | 3967 | 6316 | 2632 |
| Particles >6µm | ASTM D7647 >1300 | ▲ 2161 | ▲ 2065 | 940 |
| Particles >14µm | ASTM D7647 >80 | ▲ 368 | ▲ 145 | 78 |
| Particles >21µm | ASTM D7647 >20 | ▲ 124 | ▲ 37 | 18 |
| Particles >38µm | ASTM D7647 >4 | ▲ 19 | ▲ 8 | 2 |
| Particles >71µm | ASTM D7647 >3 | 2 | 4 | 0 |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 | ▲ 19/18/16 | ▲ 18/14 | 17/13 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|------------------|-------------------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g ASTM D8045 1.5 | 1.30 | 0.954 | 1.016 |

OIL ANALYSIS REPORT

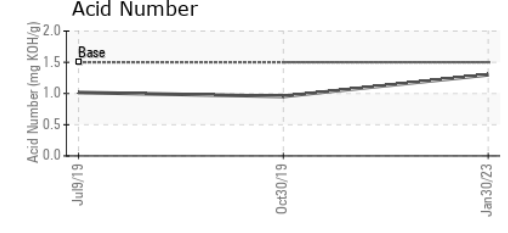
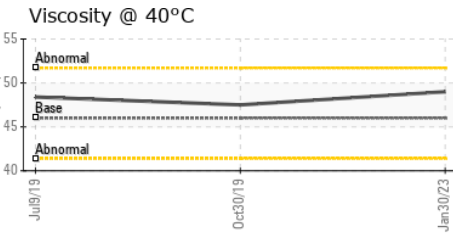
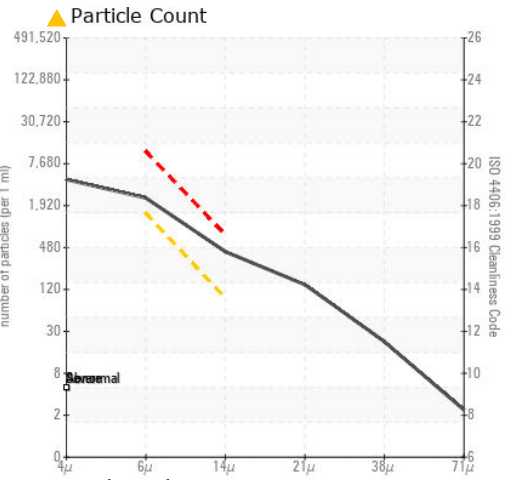
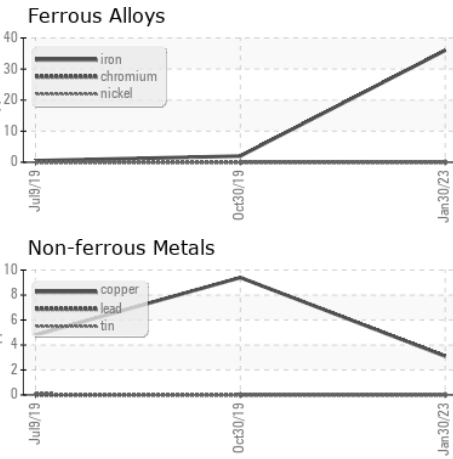


| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | VLITE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | ▲ MODER | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | 0.2% | NEG |
| Free Water | scalar | *Visual | | ▲ 1.0 | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 46 | 49.0 | 47.5 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
| Color | | | | | |
| Bottom | | | | | |

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP55743 **Received** : 09 Feb 2023
Lab Number : 05764110 **Diagnosed** : 13 Feb 2023
Unique Number : 10333718 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

PIANTEDOSI BAKING COMPANY INC
 240 COMMERCIAL ST
 MALDEN, MA
 US 02148
 Contact: Service Manager
 waldeman@piantedosi.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)